

Silicon NPN Power Transistors

3DD201

DESCRIPTION

- With TO-3 package
- High collector-base breakdown voltage
: $V_{CBO}=350V$

APPLICATIONS

- For TV horizontal output applications

PINNING(see Fig.2)

| PIN | DESCRIPTION |
|-----|-------------|
| 1 | Base |
| 2 | Emitter |
| 3 | Collector |

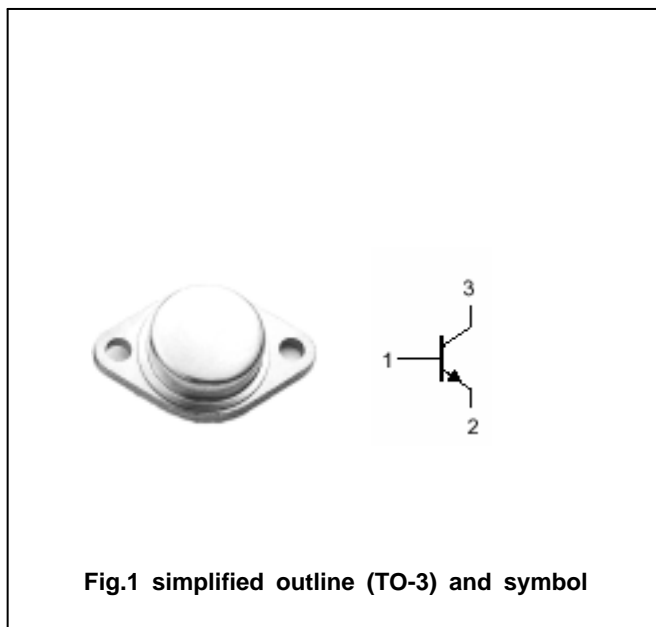


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings(Ta=)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|-----------|-----------------------------|----------------|---------|------|
| V_{CBO} | Collector-base voltage | Open emitter | 350 | V |
| V_{CEO} | Collector-emitter voltage | Open base | 150 | V |
| V_{EBO} | Emitter-base voltage | Open collector | 6 | V |
| I_C | Collector current | | 8 | A |
| P_C | Collector power dissipation | $T_C=25$ | 50 | W |
| T_j | Junction temperature | | 150 | |
| T_{stg} | Storage temperature | | -55~150 | |

THERMAL CHARACTERISTICS

| SYMBOL | CHARACTERISTICS | MAX | UNIT |
|----------|-------------------------------------|-----|------|
| R_{jc} | Thermal resistance junction to case | 1.5 | /W |

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CHARACTERISTICS

T_j=25 unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|----------------------|--------------------------------------|---|-----|------|-----|------|
| V _{(BR)CEO} | Collector-emitter breakdown voltage | I _C =50mA ; I _B =0 | 150 | | | V |
| V _{(BR)CBO} | Collector-base breakdown voltage | I _C =1mA ; I _E =0 | 350 | | | V |
| V _{(BR)EBO} | Emitter-base breakdown voltage | I _E =1mA ; I _C =0 | 6 | | | V |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =5A; I _B =0.5A | | | 1.5 | V |
| V _{BEsat} | Base-emitter saturation voltage | I _C =5A; I _B =0.5A | | | 1.5 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =350V; I _E =0 | | | 0.5 | mA |
| I _{EBO} | Emitter cut-off current | V _{EB} =6V; I _C =0 | | | 0.1 | mA |
| h _{FE} | DC current gain | I _C =2A ; V _{CE} =10V | 40 | | 120 | |

PACKAGE OUTLINE

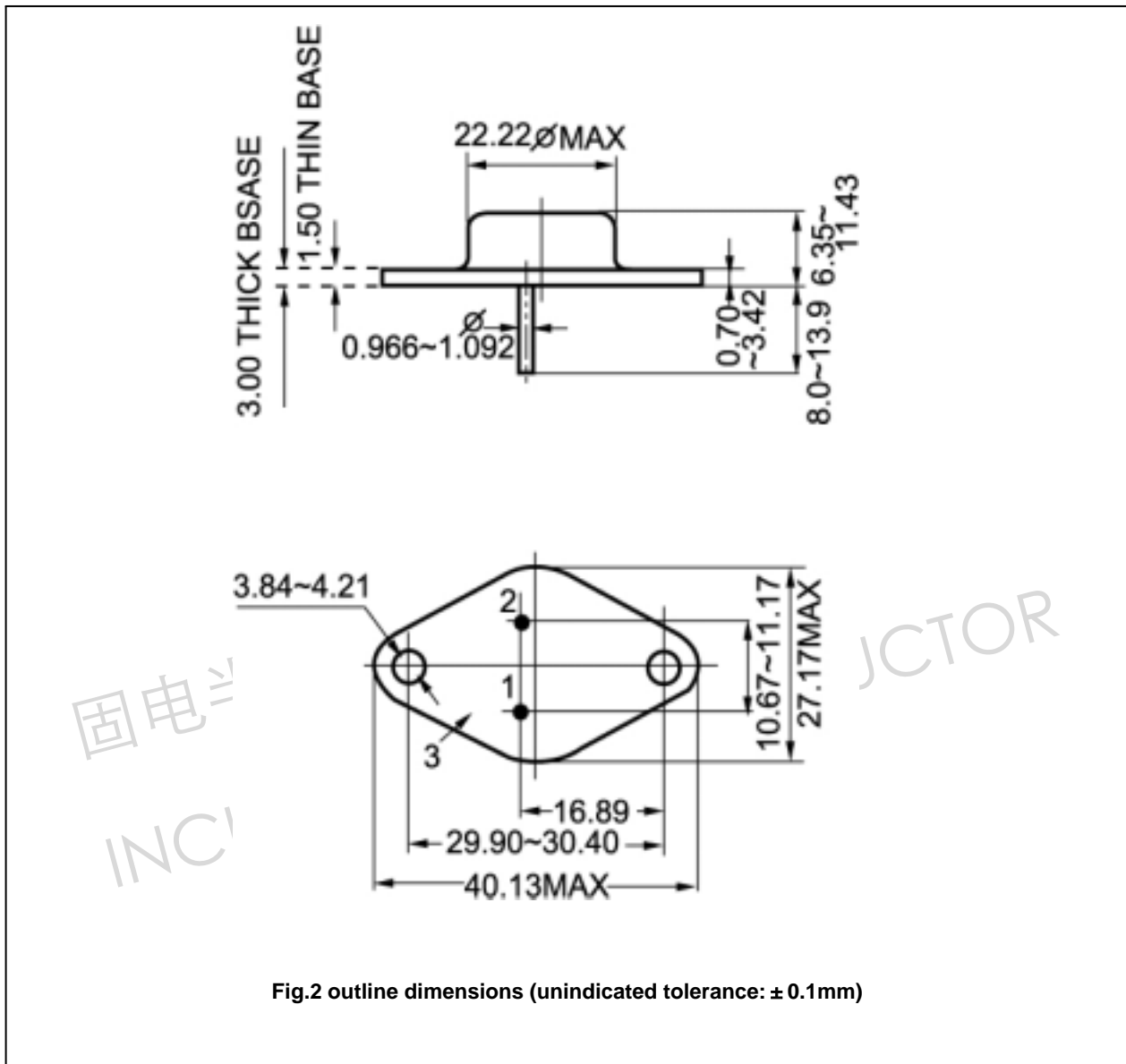


Fig.2 outline dimensions (unindicated tolerance: $\pm 0.1\text{mm}$)